

REMARKS

Claims 1, 4-6, 8-17 and 22 are pending. In the Office Action mailed March 3, 2006, the Examiner objected to the Restriction Requirement Response mailed May 23, 2005, objected to the drawings, objected to the Specification, objected to the claims, rejected Claims 1, 4-6 and 8-17 under 35 U.S.C. §112(1), rejected Claim 9 under 35 U.S.C. §112(2), and rejected Claim 1 under 35 U.S.C. §103(a). Each objection and rejection is addressed below.

I. Objection to Restriction Requirement Response mailed May 23, 2006

The Examiner objected to the Restriction Requirement Response mailed by Applicant on May 23, 2005. In particular, the Examiner stated, “Applicant also elects SEQ ID NO:3 and states that the remaining sequences will be examined if the elected sequences is found allowable. This is not true; the requirement to select a single sequence specifically states that this is a restriction, not an election of species...SEQ ID NO:3 is the genomic sequence encoding SEQ ID NO:2; SEQ ID NO:1 is the cDNA encoding SEQ ID NO:2, and the restriction between SEQ ID NO:1 and 3 is withdrawn...Applicant is required to cancel nonelected sequences.” Office Action, page 2. In order to expedite prosecution while not acquiescing to the Examiner’s arguments, the Applicants now cancel Claims 1, 4-6, 8-17 and 22. New Claims 23-30 only reference SEQ ID NOs: 1 and 3. The Applicants reserve the right to prosecute original Claims 1, 4-6, 8-17 and 22, or similar claims, at a later date.

II. Objection to the Drawings

The Examiner objected to the drawings. In particular, the Examiner stated, “Figures 1-2, 6-24 and 26-27 are objected to because tables and sequences that are included in the specification are, except for applications filed under 35 U.S.C. 371, are not permitted to be included in the drawings...Figures 5, 8-10, 12, 17, 20, 24, 26 are objected to because partial figures intended to form one complete view, on one or several sheets, must be identified by the same number followed by a capital letter...Figures 4-5 and 25 are objected to because the letters in the black boxes cannot be made out.” Office

Action, pages 2-3. The Applicant now corrects the drawings so as to be in compliance with 37 C.F.R. §§1.83(a) and 1.84(u). In particular, as the matter described in Figures 1, 2, 6-24, and 26-27 is provided in the Sequence Listing, Figures 1, 2, 6-24 and 26-27 are withdrawn, and reference to Figures 1, 2, 6-24 and 26-27 is withdrawn from the Specification. Replacement Figures 3, 4, 5 and 25, now identified as Replacement Figures 1, 2, 3, and 4, respectively, are now provided. Reference to Figures 3, 4, 5 and 25 in the Specification is now changed to Figures 1, 2, 3 and 4, respectively.

III. Objection to the Specification

The Examiner objected to the Specification. In particular, the Examiner stated, “It contains embedded hyperlinks and/or other form of browser-executable code...Applicant is required to delete the embedded hyperlinks and/or other form of browser executable code...The Brief Description of Figure 5 is objected to because the symbols are missing...” Office Action, page 3.

The Applicant now amends the Specification to remove embedded hyperlinks and/or other form of browser executable code, and to add symbols to the Brief Description of Figure 5.

IV. Objection to the Claims

The Examiner objected to the Claims. In particular, the Examiner stated, “Applicant is advised that should claims 8-12 be found allowable, claims 13-17 will be objected to under 37 C.F.R. 1.75 as being a substantial duplicate thereof. When two claims are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in the wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim...” Office Action, pages 3-4. In order to expedite prosecution while not acquiescing to the Examiner’s arguments, the Applicants now cancel Claims 13-17. The Applicant reserves the right to prosecute original Claims 13-17, or similar claims, at a later date.

V. Rejection of Claims 1, 4-6 and 8-17 under 35 U.S.C. §112(1) - Enablement

Claims 1, 4-6 and 8-17 are rejected under 35 U.S.C. §112(1) for lacking enablement. In particular, the Examiner stated, “the specification, while being enabling for a nucleic acid encoding SEQ ID NO:2, does not reasonably provide enablement for Ftn2 genes or to nucleic acids that hybridize to an Ftn2 gene that encodes SEQ ID NO:2, vectors comprising it and cells, plants and seeds transformed with it. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.” Office Action, pages 4-7.

The Applicants respectfully disagree. However, in order to expedite prosecution while not acquiescing to the Examiner’s arguments, the Applicants now cancel Claims 1, 4-6, 8-17 and 22. New Claims 23-30 describe vectors and plants with nucleic acid sequences having at least 90% homology with SEQ ID NOs: 1 or 3, wherein the nucleic acid encodes a product that functions in division of a photosynthetic prokaryote or a plastid. New Claims 23-30 do not constitute new matter. Support for new Claims 23-30 is located in the Specification at, for example, original Claims 1, 4-6, 8-12 and 22, and at page 18, lines 17-22.

VI. Rejection of Claims 1, 4-6 and 8-17 under 35 U.S.C. §112(1) – Written Description

Claims 1, 4-6 and 8-17 were rejected under 35 U.S.C. §112(1) for lacking written description. In particular, the Examiner stated, “One skilled in the art would not recognize that Applicant was in possession of the necessary common attributes or features of the genus in view of the disclosed species. Since the disclosure fails to describe the common attributes that identify members of the genus, and because the genus is highly variant, SEQ ID NOs: 1 and 4 are insufficient to describe the claimed genus. Hence, Applicant has not, in fact, described Ftn2 genes or nucleic acids that hybridize to an Ftn2 gene that encodes SEQ ID NO:2, and the specification fails to provide an adequate written description of the claimed invention.” Office Action, pages 8-9.

The Applicants respectfully disagree. However, in order to expedite prosecution while not acquiescing to the Examiner's arguments, Claims 1, 4-6, 8-17 and 22 are canceled. New Claims 23-30 describe vectors and plants with nucleic acid sequences having at least 90% homology with SEQ ID NOs: 1 or 3, wherein the nucleic acid encodes a product that functions in division of a photosynthetic prokaryote or a plastid. One skilled in the art would recognize, based on the nucleic acid sequence having at least 90% homology with SEQ ID NOs: 1 or 3, that the Applicants were in possession of the invention at the time the application was filed.

VII. Rejection of Claim 9 under 35 U.S.C. §112(2)

Claim 9 is rejected under 35 U.S.C. §112(2). In particular, the Examiner stated, "Claim 9 lacks antecedent basis for the limitation 'the organism'". Claim 9 is now canceled rendering this rejection moot.

VIII. Rejection of Claim 1 under 35 U.S.C. §103(a)

Claim 1 is rejected under 35 U.S.C. §103(a). In particular the Examiner stated, "Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over UniProt entry Q9FIG9 (2001, www.pir.iniprot.org/cgi-bin/upEntry?id=Q9FIG9)...UniProt entry Q9FIG9 discloses the amino acid sequence of a protein with 99.8% identity to SEQ ID NO:2 (see search results). UniProt entry Q9FIG9 does not disclose a nucleic acid encoding the protein. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to derive a nucleic acid sequence encoding the protein taught by UniProt entry Q9FIG9...Claims 4-6 and 8-17 are free of the prior art, given the failure of the prior art to teach or suggest constructs comprising a nucleic acid that hybridizes to a nucleic acid that encodes SEQ ID NO:2, vectors comprising it and cells, plants and seeds transformed with it." Office Action, page 10.

The Applicants disagree. However, in order to expedite prosecution while not acquiescing with the Examiner's arguments, the Applicants now cancel Claim 1.

IX. Conclusion

All grounds of rejection of the Office Action of March 3, 2006 have been addressed and reconsideration of the application is respectfully requested. It is respectfully submitted that Applicant's new claims should be passed into allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application Applicant encourages the Examiner to call the undersigned collect at (608) 218-6900.

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